I CLAIM:

1. In a multimedia projector in which a micro-electromechanical display device ("MDD") includes an array of micromirrors that each pivot on a hinge axis to effect pixel on- and off-states whereby the MDD provides a projected image by receiving an incident illumination bundle and for pixels in the on-state reflects a reflected image bundle through a projection lens, an apparatus for increasing a brightness of the projected image comprising:

an illumination source propagating light rays along an optical axis;

an anamorphic optical device receiving the light rays and forming an anamorphic incident illumination bundle that illuminates the MDD at a first f/number perpendicular to the hinge axis and at a substantially faster second f/number parallel to the hinge axis.

2. The apparatus of claim 1 in which the illumination source further includes an arc lamp and a reflector.

3. The apparatus of claim 1 in which the first f/number is about twice the second f/number.

4. The apparatus of claim 1 in which the hinge axis is parallel to an edge margin of the MDD and the anamorphic optical device includes and anamorphic light tunnel having orthogonal height, width, and length dimensions, an input aperture with a first height and a first width for receiving the light rays, and an output aperture having a second height and a second width for forming the anamorphic incident illumination bundle.

5. The apparatus of claim 4 in which the first height and the second height are substantially the same, and the first width is about twice the second width.

6. The apparatus of claim 4 in which the MDD and the output aperture each have substantially a same width-to-height ratio.

7. The apparatus of claim 1 in which the anamorphic optical device includes a collimating lens system, first and second flyseye lenslet arrays, and an imaging lens system.

8. The apparatus of claim 7 in which the MDD has a MDD aspect ratio and the first flyseye lenslet array includes an array of first lenslets each having a lenslet aspect ratio that substantially matches the MDD aspect ratio.

9. The apparatus of claim 8 in which the anamorphic incident illumination bundle illuminates the MDD at an oblique angle and the first lenslets have a rhomboid shape that compensates for the oblique angle.

10. The apparatus of claim 7 in which the first and second flyseye lenslet arrays include arrays of respective first and second lenslets, the first lenslets each having a center of curvature that is offset to steer the light rays toward corresponding ones of the second lenslets.

11. The apparatus of claim 7 in which the second lenslets have centers of curvature that are centered in each lenslet for optimal light transmission efficiency.

12. The apparatus of claim 7 in which the first and second flyseye lenslet arrays are tilted about the optical axis such that the anamorphic incident illumination bundle has an elliptical cross section having a major axis that is substantially aligned with the hinge axis of the MDD.

13. The apparatus of claim 7 in which the imaging lens system images the first flyseye lenslet array onto the MDD, thereby producing the anamorphic incident light bundle.